## DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-004466

Address: 333 Burma Road **Date Inspected:** 03-Nov-2008

City: Oakland, CA 94607

**OSM Arrival Time:** 730 **Project Name:** SAS Superstructure **OSM Departure Time:** 1530 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes N/A No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** OBG

## **Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Erik Prue was present to perform Ultrasonic Testing (UT) of Orthotropic Box Girder (OBG) components, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

### **OBG** Assembly:

QA UT Inspector performed initial Phased Array Ultrasonic Testing (PAUT) in the marked tack weld areas of the u-rib to deck plate Partial Joint Penetration (PJP) welds after the conventional Ultrasonic Testing (UT) of tack welds. QA UT inspector performed PAUT on the following deck panels:

#### DP-108-002

Weld# 1 - 0 tacks PAUT'ed - 0 indications non-compliant.

Weld# 2 - 5 tacks PAUT'ed - 3 indications non-compliant.

Weld# 3 – 1 tacks PAUT'ed – 1 indication non-compliant.

Weld# 4 - 5 tacks PAUT'ed - 4 indication non-compliant.

Weld# 5 - 2 tacks PAUT'ed - 1 indication non-compliant.

Weld# 6 - 3 tacks PAUT'ed - 2 indications non-compliant.

Weld# 7 – 4 tacks PAUT'ed – 2 indications non-compliant.

Weld# 8 – 5 tacks PAUT'ed – 4 indications non-compliant

Please see U-rib to deck panel tack weld assessment sheet dated 03 November, 2008 for specific information on PAUT inspection.

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QA UT inspector performed PAUT on the following deck panels:

DP-324-002

Weld# 3 - 7 tacks PAUT'ed - 5 indications non-compliant.

Weld# 4 - 6 tacks PAUT'ed - 3 indications non-compliant.

Weld# 5 - 8 tacks PAUT'ed - 6 indications non-compliant.

Weld# 6 – 7 tacks PAUT'ed – 4 indication non-compliant.

QA UT Inspector performed PAUT on welds 1 and 2 on 02 November, 2008. Please see U-rib to deck panel tack weld assessment sheet dated 03 November, 2008 for specific information on PAUT inspection.

No other activities observed.

## **Summary of Conversations:**

No signifigant conversations this day.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Peter Dauterman, 15002199593, who represents the Office of Structural Materials for your project.

Inspected By:	Prue,Erik	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer